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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/799,183

03/12/2004

Scott J. Campbell

X-1449 US

8162

24309

7590

06/07/2005

EXAMINER

ELISCA, PIERRE E

XILINX, INC

ATTN: LEGAL DEPARTMENT

2100 LOGIC DR

SAN JOSE, CA 95124

ART UNIT

PAPER NUMBER

3621

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,183

Applicant(s)

CAMPBELL ET AL.

Examiner

Pierre E. Elisca

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9, 12-15 and 18 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 10, 11, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to Applicant's response, filed on 03/04/2005.
2. Claims 1-18 are pending.

Allowable Subject Matter

3. Claims 4, 5, 10, 11, 16, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-18 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Park (U.S. Pat. No. 5,757,909) in view of Luyster (U.S. Pat. No. 6,578,150).

As per claims 1-3, 6-9, 12-16, and 18 Park substantially discloses an illegal view and copy protection method in a digital video system for preventing an illegal user viewing the digital video system and copying therefrom, the method comprising the step of:

Generating a set of attempts keystream bits, generating, from a current seed, a set of current keystream bits (see., abstract, col 6, lines 29-61, col 9, lines 64-67, col 10, lines 1-7).

Park fails to explicitly disclose the steps of generating test bits, cipher bits, and comparing the keystream bits. However Luyster discloses a data encryption system for encrypting an n-bit block of input in a plurality of rounds , where n is 128 bits (see., abstract, col 2, lines 23-42, col 27, lines 48-65, col 28, lines 43-64). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teaching of Park by including the limitation detailed above as taught by Luyster because this would prevent an illegal user from decoding digital keystreams.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1 and 7 are rejected under 35 U.S.C. 101 because it is directed to non-statutory subject matter, specifically, as directed to an abstract idea.

Claims 1 and 7 recite a method for decoding a keystream which do not define any structural and functional interrelationships with a general purpose computer for permitting the claimed functions to be realized. In contrast, a statutory claim would define structural and functional interrelationships between data structures and functional parts and a computer which permit the data functions to be realized. Thus, the claims are rejected as being non-statutory as described above.

RESPONSE TO ARGUMENTS

8. Applicant's arguments filed on 03/04/2005 have been fully considered but they are not persuasive.

REMARKS

9. In regard to Applicant's arguments, Applicant argues that the the prior art of record (Park 909" and Luyster 150") fail to anticipate or render obvious the recited feature:

a. " decoding a keystream". However, the Examiner respectfully disagrees with this assertion since Park discloses this limitation in col 5, lines 11-38, specifically wherein said a bitstream for decrypting (decrypting or decoding) the split keystream for reading in key information, and descrambling the split bitstream according to the read in key information. Please note that the process of decrypting a keystream is readable as decoding a keystream.

b. "Applicant also maintains that Park and Luyster cannot be combined", the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

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The rationale to modify or combine the prior art does not have to be expressly stated in the prior art; the rationale may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. In *re* Fine, 837 F.2d 1071, 5USPQ2d 1596 (Fed. Cir. 1988); In *re* Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). See also In *re* Eli Lilli & Co., 902 F.2d 943, 14 USPQ2d 1741 (Fed. Cir. 1990) (discussion of reliance on legal precedent); In *re* Nilssen, 851 F.2d 1401, 7USPQ2d 1500 (Fed. Cir. 1988) (references do not have to explicitly suggest combining teachings); *Ex parte* Clapp, 227 USPQ 972 (Bd. Pat. App. & Inter); and *Es parte* Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993) (reliance on logic and sound scientific reasoning).

Also in reference to *Ex parte* Levengood, 28 USPQ2d, 1301, the court stated that "Obviousness is a legal conclusion, the determination of which is a question of patent law.

Motivation for combining the teachings of the various references need not to explicitly found in the reference themselves, In *re* Keller, 642 F.2d 413, 208USPQ 871 (CCPA 1981). Indeed, the Examiner may provide an explanation based on logic and sound scientific reasoning that will support a holding of obviousness. In *re* Soli, 317 F.2d 941 137 USPQ 797 (CCPA 1963)."

Conclusion

10. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre E. Elisca whose telephone number is 571 272 6706. The examiner can normally be reached on 6:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 703 305-9769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pierre Eddy Elisca

Primary Patent Examiner

June 01, 2005